

Appln No. 09/900,224

Amdt date June 28, 2005

Reply to Office action of April 28, 2005

Amendments to the Specification:

Please amend the paragraph beginning at page 4, line 20 as follows:

FIG. 1 is a block diagram of a parameter concealment embodiment of the present invention. A first device 10 transmits a parameter signal 14 and a control signal 16 to a second device 12. The second device includes a parameter concealment logic block 18 used to conceal device input parameters passed between the two devices. The parameter concealment logic block receives the parameter signal and the control signal and performs a transformation on the parameter signal according to the control signal in order to generate a destination parameter signal 20. The destination parameter signal is transmitted to destination registers 22 within the device. In one embodiment of a parameter concealment logic block according to the present invention, the destination parameter signal in the destination registers is transmitted as a feedback signal 24 to be reused in the parameter concealment logic block.

Please amend the paragraph beginning at page 5, line 29 as follows:

The second device receives the parameter signals and the control signals. The second control logic extracts the control signals and uses them to generate a second key selection signal

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322 transmitted to the second key table module. In response to the second key selection signal, the second key table module 318 generates a second key signal 324 transmitted to the inverse transformation module. The inverse transformation module uses the second key signal to inversely transform the parameter signals and generate a destination parameter signal 326 for use by the second device.

Please amend the paragraph beginning at page 7, line 24 as follows:

Once the second key is identified, operation proceeds to step 42, and the transformed parameter signal is inversely transformed by interface operation logic block 319 (FIG. 7) to generate a destination parameter signal. The inversely transformed index value signal is compared with the index value signal received by control logic block[[,]]. At step 44, the second device determines whether the two index value signals match. If not, the destination parameter signal is discarded at step 46, and operation terminates at step 50. On the other hand, if the two index value signals do in fact match, then operation proceeds to step 48, and the destination parameter is loaded to a particular destination register as dictated by the control logic block and the control signal received by the control logic block. Operation then terminates at step 50.

Please amend the paragraph beginning at page 12, line 24 as follows:

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More specifically, a first device 90 generates a random message signal 94 transmitted to a second device 92. A predefined configuration signal 96 is used by the second device to generate 98 a first transformed message signal, storing the first transformed message signal in a first destination register [[100]] 200. The first transformed message signal stored in the destination register is transmitted [[102]] 202 to the first device and stored in a compare register [[104]] 208.

Please amend the paragraph beginning at page 12, line 32 as follows:

The first device uses the predefined configuration signal 96 and the generated random message signal 94 to create a second transformed message signal stored in a second destination register [[106]] 206 in the first device. The first device compares the first and second transformed message signals to authenticate the identity of the second device. If the first and second transformed message signals are the same, then the second device has proven itself by using the same transformation function as the first device. If the first and second transformed message signals are different, then the second device failed to use the same function and the second device's identity is suspect.